

ABSTRACT

The invention relates to a diaphragm pump (1) including a working diaphragm (3) that, during pumping movements, oscillates between a bottom dead center and a top dead center. The working diaphragm (3) delimits a pump chamber (7) between itself and a concave pump chamber wall (6) and when located at the top dead center position, the working diaphragm (3) rests against the pump chamber wall (6). The working diaphragm (3) has an inner and an outer annular zone (8, 9), which can be deformed during pumping movements, and a stiffened diaphragm area which, in essence, cannot be deformed during pumping movements is placed between these annular zones (8, 9). This non-deformable diaphragm area can be stiffened, for example, by stiffening ribs (10), which are radially oriented and spaced apart in the circumferential direction. The working diaphragm (3) neither tends to increase the total chamber volume nor reduce the suction chamber volume, even in the event of differences in pressure loads occurring between the upper side and the lower side of the diaphragm.